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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/770,704 | 02/03/2004 | Michael G. Poterek | 5516USAD1 | 1308 |

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|---|---|---|
| 21186 7590 11/15/2006 | | EXAMINER |
| SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. | | SHAPIRO, JEFFERY A |

| ART UNIT | PAPER NUMBER |
|---|---|
| 3653 | |

P.O. BOX 2938
MINNEAPOLIS, MN 55402

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 10/770,704 | POTEREK ET AL. |
| | Examiner | Art Unit | |
| | Jeffrey A. Shapiro | 3653 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>28 August 2006</u>.

2a)☒ This action is **FINAL**.      2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *11-54* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-54* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1.      The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

2.      Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention.

        For example, in Claim 27, line 4, it is unclear what "receives accept and reject

signals", in line 6, what is "determining", in line 8, what is "receiving sensor signals" and

in line 10, what is "generating" the messages.

### *Claim Rejections - 35 USC § 103*

3.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.      Claims 11-13, 15-18, 20, 21, 27-34, 53 and 54 are rejected under 35 U.S.C.

103(a) as being unpatentable over Nakagawa (US 6,711,874 B1) in view of Feurstein et

al (US 4,011,155).

        Nakagawa discloses a weight checker (30 or 300) (construed as a checkweigher)

with checkweigher logic circuitry as part of a pharmaceutical packaging apparatus with

conveyor (310). See figures 8a, 9a and 10, for example as well as col. 5, lines 22-31

which shows and discusses said checkweigher logic. These flowcharts indicate logic

which is part of the check weigher controls (30) and seal checker controls (40). See col. 10, line 30-col. 11, line 67. The logic can be construed as Applicant's checkweigher logic. Bite detection is also input into the system, as illustrated in figure 7. Nakagawa also discloses a combination controller (10), package controller (20), weight checker control unit (30) and seal checker control unit (40) that work together to control Nakagawa's packaging system. A remote controller (50) has a central processing unit (51) with memory (52 and 53). Diagnostic history is stored in RAM (53) and is illustrated in figure 8b. Controller (50) has a touch screen comprising an indicator means (54) and warning means (55). See col. 7, lines 27-55. Note figure 10, elements (S46A, S46 and S52) as well as col. 11, lines 45-61 and col. 12, lines 25-44, which illustrates and discusses the displaying of messages on touch screen display (54) concerning the "integrity" of the system. Specifically regarding Claim 21, note that elements (S46A, S46 and S52) concerns shutting down the system due to detected system abnormalities.

Nakagawa does not expressly disclose, but Feurstein discloses sensing items such as packages (94) and rejecting those that are not of adequate length from a conveyor stream. See col. 8, line 65-col. 9, line 8 and figures 6, 8a and 8b. It is considered obvious to use the same set of beams to detect both length and skew of a package since skew detection is considered to be a subset of length detection. Note from figure 6 that if the package is skewed, certain beams will be broken sooner than they would normally, thus causing the sensed "length" covered by the package to be increased past an accepted norm, therefore causing the package to be rejected. See

also figure 15, showing reject conveyors (8a, 8b and 8c). See also col. 9, lines 9-17, which indicates that a photo detector pair (212a-212b) that causes redirection of the rejected package to the reject conveyors. Detection of the presence or absence of packages by the photo detectors is indicative of movement of said packages through the system.

Regarding Claims 15 and 17, note Feurstein, col. 15, line 64-col. 16, line 2, which indicates a limit switch (47) is used to determine if a package item has moved onto the reject conveyor. Note that it would have been obvious to have a similar switch to detect passage of items onto any offshoot conveyors onto which items might have been redirected, such as an acceptance conveyor.

Regarding Claims 16, 18 and 32, note that Feurstein discloses use of a limit switch (354) that senses when a particular conveyor is full of packages or blocked by them. See col. 16, lines 47-49.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have added sets of photo detector pairs throughout Nakagawa's system, and specifically on Nakagawa's conveyor system, as taught by Feurstein. Further, it would have been obvious to have incorporated the rejection air jet and associated rejection conveyor so as to reject an item produced by Nakagawa's system that was not of the correct length or that was skewed.

The suggestion/motivation to do so would have been to reject packages that are defective regarding length or skew of a package as it is presented to the checkweigher. See Feurstein, col. 8, line 65-col. 9, line 8.

Finally, note that it would have been obvious to use a photo detector to detect passage of items from the main conveyor or from the checkweigher to offshoot conveyors as well as a photo detector to detect that a particular conveyor offshoot is blocked with items, as taught by Feurstein.

The suggestion/motivation would have been to indicating that a reject or acceptance had occurred or that items are blocking a particular offshoot conveyor.


Regarding Claims 30 and 31, it would have been obvious to one of ordinary skill in the art in light of Nakagawa's disclosure, as described above, to have generated a message on Nakagawa's touchscreen indicating that "ten items in a row" or "ten items out of the last thirty" were rejected. It would have been a matter of design choice based on the quality standards of the items produced and their production process as to what level of rejections triggers a message.

6.      Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa (US 6,711,874 B1) in view of Feurstein et al (US 4,011,155) and further in view of Komori et al (US 5,990,422).

Nakagawa and Feurstein disclose the system as described above.

Nakagawa does not expressly disclose, but Komori discloses a checkweigher with conveyor having independent integrity checking logic (25) with sensors (15, 20, 21,

22) that provide information to the independent checking logic **concerning the**

**movement of the items** through the checkweigher system. See col. 5, lines 10-39 and

figure 4 of Komori. Komori further determines gap length between items and attempts

to maintain items having particular lengths with sufficient gap between them for

presentation to the checkweigher.

At the time of the invention, it would have been obvious to one ordinarily skilled in

the art to have used photo detectors to determine gap length between successive items

and apply this gap length to said items before they reach the checkweigher.

The suggestion/motivation would have been present items to the checkweigher

in a manner facilitating accurate measurement of the items while maintaining optimum

operation throughput. See Komori, col. 1, lines 45-50, 62-67, col. 2 lines 1-15 and lines

65-67, and col. 3, lines 1-6, 24-28 and 61-67.

5.      Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Nakagawa (US 6,711,874 B1) in view of Feurstein et al (US 4,011,155) and further in

view of Nozaki et al (US 4,822,647).

Nakagawa and Feurstein disclose the system as described above.

Nakagawa does not expressly disclose, but Nozaki discloses a high/low pressure

sensor (15) that detects the pressure in a line (7 and 17).

At the time of the invention, it would have been obvious to one ordinarily skilled in

the art to have used a similar pressure sensor to detect pressure in said air jet line.

The suggestion/motivation would have been to detect a low-pressure situation

concerning the reject station. Nakagawa provides further suggestion for detecting and

reporting the condition of the air jet because it discloses detecting and reporting the

integrity of various parts of the system through sensors and a touch screen display, as

previously discussed.


6.      Claims 22, 35, 37, 38, 40-42 and 44 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Nakagawa (US 6,711,874 B1) in view of Komori et al (US

5,990,422).

Nakagawa discloses the system as described above.

Nakagawa does not expressly disclose, but Komori discloses a checkweigher

with conveyor having independent integrity checking logic (25) with sensors (15, 20, 21,

22) that provide information to the independent checking logic **concerning the**

**movement of the items** through the checkweigher system. See col. 5, lines 10-39 and

figure 4 of Komori. Komori further determines gap length between items and attempts

to maintain items having particular lengths with sufficient gap between them for

presentation to the checkweigher.

At the time of the invention, it would have been obvious to one ordinarily skilled in

the art to have used photo detectors to determine gap length between successive items

and apply this gap length to said items before they reach the checkweigher.

The suggestion/motivation would have been present items to the checkweigher

in a manner facilitating accurate measurement of the items while maintaining optimum

operation throughput.  See Komori, col. 1, lines 45-50, 62-67, col. 2 lines 1-15 and lines

65-67, and col. 3, lines 1-6, 24-28 and 61-67.

7.      Claims 23, 36, 39. 43 and 45-52 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Nakagawa in view of Komori et al and further in view of Feurstein.

        Nakagawa discloses the system as described above.

        Nakagawa does not expressly disclose, but Feurstein discloses sensing items

such as packages (94) and rejecting those that are not of adequate length from a

conveyor stream.  See col. 8, line 65-col. 9, line 8 and figures 6, 8a and 8b.

        Regarding Claims 24-26, note Feurstein, col. 15, line 64-col. 16, line 2, which

indicates a limit switch (47) is used to determine if a package item has moved onto the

reject conveyor.  Note that it would have been obvious to have used a similar switch in

Nakagawa's system to detect passage of items onto any offshoot conveyors onto which

items might have been redirected, such as an acceptance conveyor.

        Feurstein further discloses use of a limit switch (354) that senses when a

particular conveyor is full of packages or blocked by them.  See col. 16, lines 47-49.

Note that a limit switch, as described in Claim 39, can be considered a pressure switch.

        At the time of the invention, it would have been obvious to one of ordinary skill in

the art to have added sets of photo detector pairs throughout Nakagawa's system, and

specifically on Nakagawa's conveyor system, as taught by Feurstein.  Further, it would

have been obvious to have incorporated the rejection air jet and associated rejection

conveyor so as to reject an item produced by Nakagawa's system that was not of the correct length or that was skewed.

The suggestion/motivation to do so would have been to reject packages that are defective regarding length or skew of a package as it is presented to the checkweigher. See Feurstein, col. 8, line 65-col. 9, line 8.

The suggestion/motivation to do so would have been to reject packages that are defective regarding length or skew of a package as it is presented to the checkweigher. See Feurstein, col. 8, line 65-col. 9, line 8.

Finally, note that it would have been obvious to use a photo detector to detect passage of items from the main conveyor or from the checkweigher to offshoot conveyors as well as a photo detector to detect that a particular conveyor offshoot is blocked with items, as taught by Feurstein.

The suggestion/motivation would have been to indicating that a reject or acceptance had occurred or that items are blocking a particular offshoot conveyor.

Regarding Claims 48 and 49, it would have been obvious to one of ordinary skill in the art in light of Nakagawa's disclosure, as described above, to have generated a message on Nakagawa's touchscreen indicating that "ten items in a row" or "ten items out of the last thirty" were rejected. It would have been a matter of design choice based on the quality standards of the items produced and their production process as to what level of rejections triggers a message.

***Response to Arguments***

8.      Applicant's arguments filed 8/28/06 have been fully considered but they are not

persuasive.  First, regarding the 112 rejection of Claim 27, note that the cited claim

language is still considered unclear.  It is not clear that the "logic independent from the

checkweigher logic" is the circuitry receiving accept and reject signals, determining if the

packs were properly positioned, receiving sensor signals, and "generating" the

messages.  The "logic independent from the checkweigher logic" is not positively

recited, and each step is not linked to the independent logic.

Regarding the rejection of Independent Claims 11, 22, 27, 35, 38, 41, 45 and 53,

Nakagawa discloses a system using a conveyor and checkweigher to check the weight

of recently produced pharmaceutical packages.  Applicants assert that Nakagawa does

not disclose an "independent integrity checkweigher logic".  Applicants' independent

logic circuit receives input from sensors such as photo-sensors that determine if

incoming packages are skewed or jammed.  This logic circuit also produces messages

regarding skewing, jamming or packages that are too closely spaced.  The independent

logic also receives accept or reject signals from the checkweigher logic.

Note that Nakagawa discloses independent circuitry (10 and 50) that operates

independently of the checkweigher.  For example, see col. 7, lines 27-55, which

mentions that controller (50) receives accept and reject signals from the checkweigher

logic (30), which is directly connected to the weight detector (305).  In col. 7, lines 43-

47, warning means (55) generates a message/communication to the operator that the

checkweigher is operating incorrectly.

Feurstein discloses a conveyor with photo detector pairs used to detect the

position of packages and the package length and orientation before it enters a reject

portion of the conveyor. Komori discloses detecting length of an item and maintaining

particular gap between items based in part on their length so as to present said items

properly to a checkweigher.

As described above, Feurstein's and Komori's teachings of including package

position detectors and package gap detectors combined with Nakagawa's disclosure

provides one of ordinary skill with motivation to include package position, length and

orientation detectors as well as gap sensors feeding their output to the independent

control logic (50). This is the same structure as described in Applicants' claims. In fact,

Applicants at paragraph 40 describe a wireless operator interface (700) connected to

the independent integrity logic, and including a display and keypad. Nakagawa also

includes a display and keypad in the form of a touch screen (54), therefore providing

further evidence that Nagagawa, Feurstein and Komori read on Applicants' claims.

### Conclusion

9.     **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

10.     Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jeffrey A. Shapiro whose telephone number is

(571)272-6943. The examiner can normally be reached on Monday-Friday, 9:00 AM-

5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Patrick H. Mackey can be reached on (571)272-6916. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JAS

November 10, 2006

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